UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,485	09/02/2003	Makoto Okada	21.1886C	2320

21171 7590 06/05/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
CAO, DIEM K	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/652,485	OKADA ET AL.	
	Examiner	Art Unit	
	Diem K. Cao	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-7 are pending. Applicant has amended claims 1, 2, 6 and 7.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/28/2006 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobbaert et al (Pub. No. 2003/0079046).

Regarding claims 1-7, it is noted that broadly as disclosed, a reaction is an operation in response to information. See application as filed, [0002).

5. As to claim 1, Cobbaert teaches a method (communication mechanism employing continuations), comprising:

- storing a first set of reactions of a first program (methods/functions 131, B2 of program object B / program object Mary), wherein each reaction in the first set comprises indicia of one of a plurality of operations available for performance (methods/functions B1, B2 are defined for and performed by program object B when invoked) ([0033], [0036]-[0040]), and execution information (argument, [0051]) associated with each identified operation;

- a second set of reactions of a second program (methods/functions of further program object), wherein each reaction in the second set comprises indicia of one of a plurality of operations available for performance [it is noted that the further program includes a third program (page 4, claims 3, 4), thus similar to the operation of program A or program Mary, such methods/functions are performed by the further program object when invoked] and execution information (argument) associated with each identified operation;

- performing one or more operations (method/function A1 of program object A) of a first plurality of operations available for performance (methods/functions A1, A2 of program object A, [0034], fig. 3);

- in response to the performing one or more operations, generating a transmission (SEND message, including continuation id and type), sent via a communication path common to the first, second and third programs (inherent from the first, second and third programs are reside in a single computer, thus they share a common communication path; [0030] and [0033]. Also notes the Applicant's definition of the communication path; page 12, lines 3-5), comprising indicia of the one or more performed operations (function get age) and information operated on (age of object Mary) by each of the one or more operations;

- receiving the transmission at the first and the second programs via the communication path (deliver message to the further program which includes first program and third program) (0036, fig. 5);

- at the first program, determining whether the received indicia corresponds to at least one of the first set of reactions (determine which continuation, [0007], [0018]), and if it does, performing an execution using the associated execution information (age parameter) of the one of the first set of reactions (execute function Mary_reply-age) ([0049]-[0052]); and

- at the second program, determining whether the received indicia corresponds to at least one of the second set of reactions, and if it does, performing an execution using the associated execution information of the one of the second set of reactions [it is noted that the further program includes a third program (page 4, claims 3, 4), and thus operations on a third/different program similar to those of program A would have been inherent/obvious].

Cobbaert does not teach the first/second set of reactions of the first/second programs are stored at first/second computers, nor the one or more operations are performed at a third computer, and a common communication path common to the first, second and third computers. However, Cobbaert teaches the programs reside in different execution environments ([0003]). It is known that different execution environments are typically implemented by different computers/platforms. Such examples may be found in a heterogeneous network, and since the computers could send messages to each other, inherently, they are connected via network, thus, there is a common communication path common to the first, second and third computers.

Therefore, it would have been obvious to implement the different execution environments by different computers in Cobbaert, i.e., to locate first/second programs on first/second computers and perform the one or more operations at a third computer.

6. As to claim 2, Cobbaert teaches:

- executing original operations (program object A) of different operation types (typed continuation) (methods/functions A1, A2 of program object A, [0034], fig. 3);

- when original operations are executed, transmitting messages (message SEND) on a communication path (fig. 3) common to a plurality of objects (inherent from the first, second and third programs are reside in a single computer, thus they share a common communication path; [0030] and [0033]. Also notes the Applicant's definition of the communication path; page 12, lines 3-5), whereby the plurality of objects (program object Mary, further program) receive the messages, where the messages have a format (format specified by SEND message, fig. 5) shared by the objects, and where each message indicates the operation type of its corresponding executed operation (continuation type, [0036]); and

- when messages so transmitted to the plurality of objects are received, determining whether to react to each message based on each message's indicated operation type (determine which continuation, [0007], [0018]), and when determined to react to a given message, reacting by executing a reaction operation (execute function Mary__reply_age) ([0049]-[0052]) that is pre-associated with the message's indicated operation type (type 'AGE'), where each object has its own set of reaction operations (method slfunctions defined for program object Mary) and

associations between its reaction operations and at least some of the operation types (determine via continuation type).

While Cobbaert does not explicitly teach the associations are pre-registered, Cobbaert teaches the associations are pre-defined via constructors of messages (figs. 3, 5 and denoting text) and class definitions ([0037], [0039], [0041]-[0044]). Class definition is a form of pre-registration (class data structure). Therefore, it would have been obvious to pre-register the associations in Cobbaert.

7. As to claim 4, Cobbaert teaches a message further indicates a parameter (age parameter) of the original operation (function A1 of program object A) that triggered the message, and wherein the reaction operation (function Mary_Reply-Age of program object Mary) triggered by the message uses as its own parameter the parameter included with the message that determined the execution of the reaction operation (type `age', [0036]-[0047).

8. As to claim 7, see rejection of claim 2 above.

9. Claims 3, 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobbaert et al as applied to claim 2 in view of Hao et al (U S Pat. 5,844,553).

10. As to claim 3, Hao teaches original operations of graphical user interface (window) events (window events), and types of graphical user interface events (input events such as button, motion, leaving events). Col. 3, lines 48-56; Col. 7, line 66 - col. 8, line 10. Therefore, it would

have been obvious to include GUI events of various types into Cobbaert. One of ordinary skill in the art would have been motivated to combine the teachings of Cobbaert and Hao because Hao uses the graphical user interface to provide program observation and control, and which would have provided Cobbaert with a more intuitive user interface.

11. As to claim 5, Cobbaert as modified teaches the communication path comprises a network chat channel (real-time collaboration window sessions, col. 7, lines 5-28).

12. As to claim 6, Cobbaert as modified teaches the plurality of objects comprise programs executing on different computer systems (110 as a third computer, 120 and 130 as first and second computers, fig. 2).

Response to Arguments

13. Applicant's arguments filed 3/28/2006 have been fully considered but they are not persuasive.

As to Applicant's arguments regarding Cobbaert does not teach "generating a transmission, sent via a communication path common to the first, second and third computers", and "receiving the transmission at the first and second computers via the communication path".

Examiner respectfully traverses Applicant's arguments:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., The transmission is simply sent to a common communication path, so that all objects (computers) on

the communication path can access the transmission. Thus, the claimed invention does not require specifically directing message to each individual object, as required by Cobbaert) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further more, common communication path in the instant application is defined as LAN or any similar communication means (col. 12, lines 3-5), and Cobbaert as modifed teaches the first and second computers receive the transmitted information via a communication path. Moreover, claims 2 and 7 do not claim such aspect of the instant application as claimed by the Applicant. Claims 2 and 7 recite "transmitting messages" and "messages so transmitted to the plurality of objects", one of ordinary skill in the art would interpret that multiple messages are sent to multiple objects, i.e., each message for each object via LAN communication means. Thus, the arguments are not persuasive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Diem Cao

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER